



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,888	07/21/2005	Felice Pecorari	SAI013WUS/AG/bp	7784
21254	7590	09/28/2006	EXAMINER	
MCGINN INTELLECTUAL PROPERTY LAW GROUP, PLLC 8321 OLD COURTHOUSE ROAD SUITE 200 VIENNA, VA 22182-3817			LAZO, THOMAS E	
			ART UNIT	PAPER NUMBER
			3745	

DATE MAILED: 09/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/529,888

Applicant(s)

PECORARI ET AL.

Examiner

Thomas E. Lazo

Art Unit

3745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 14-18 is/are rejected.
- 7) ☒ Claim(s) 9-13 and 19 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>7/1/05</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

The abstract of the disclosure is objected to because it is more than 150 words in length.

Correction is required. See MPEP § 608.01(b).

Claim Objections

Claim 1 is objected to because of the following informalities:

In claim 1, line 6, "a inner" should be --an inner--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 3, the phrase "so called full complement type" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4, 5, and 7 and 3, as far as it is definite, are rejected under 35 U.S.C. 102(b) as being anticipated by Rogov et al. (3,357,312) or Blanc (CH 244148 A). Rogov et al. discloses a hydraulic machine with radial cylinders and radial stroke, arranged in contact with an outer cam 16 and coplanar with the cylinders, each equipped with a roller 15 on a path of the cam 16 wherein the machine has, in each piston, a rolling bearing defined by an annular cage made up of an inner ring coupled with a pin 13 for supporting the roller, and an outer ring coinciding with the roller 15 itself, and the roller 15 is coupled in rotation with the piston with a rolling bearing 15.

Blanc discloses a hydraulic machine with radial cylinders and radial stroke, arranged in contact with an outer cam and coplanar with the cylinders, each equipped with a roller 7 on a path of the cam, wherein the machine has, in each piston, a rolling bearing defined by an annular cage made up of an inner ring coupled with a pin for supporting the roller 7, and an outer ring coinciding with the roller 7 itself, and the roller is coupled in rotation with the piston with a rolling bearing 7.

Claims 8 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Burns (3,841,279). Burns discloses a hydraulic machine with radial cylinders of the type comprising

pistons with radial stroke, arranged in contact with an outer cam and coplanar with the cylinders, each equipped with a roller 76 on a path of the cam, wherein the machine has, in each piston, an anti-friction ferrule 80 placed in contact with a pin 78 for the roller 76, wherein the ferrule 80 is coupled with a inner diameter of the roller 76 itself.

Claims 15-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Allart et al. (6,186,046). Allart et al. discloses a hydraulic machine with radial cylinders of the type comprising pistons with radial stroke, arranged in contact with an outer cam and coplanar with said cylinders, each equipped with a roller on a path of said cam, wherein the machine includes both static and dynamic O-rings 62,64,66 each consisting of a metal ring mounted with interference in the coupling on a sealing diameter and housed in a throat with slight axial clearance, the throat has a large depth with respect to its width and that of the ring, and the side shoulder of each O-ring 62,64,66 has a width slightly greater than the depth of the throat.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rogov et al. or Blanc, as applied to claim 1 above, in view of Cyphelly (4,144,798). Rogov et al. or Blanc

Art Unit: 3745

disclose all of the claimed subject matter except for the rolling roller bearing being small to allow the roller in the liner of the cylinder.

Cyphelly teaches for a hydraulic machine with a rolling roller bearing 8 and that the bearing 8 is small to allow the roller in the liner of the cylinder for the purposes of providing a sufficient seal, good conversion and small mass of moving parts. See Cyphelly col. 1, lines 35-40.

Since Rogov et al. or Blanc and Cyphelly are all related to hydraulic piston machines with rolling roller bearings, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the bearing of Rogov et al. or Blanc, based on the teachings of Cyphelly, to be small to allow the roller in the liner of the cylinder for the purposes of providing a sufficient seal, good conversion and small mass of moving parts.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rogov et al. or Blanc, as applied to claim 1 above, in view of Schlicht (3,477,884). Rogov et al. or Blanc disclose all of the claimed subject matter except for the bearing and its outer ring being treated with setting heat treatments on steel of the type with minimized inclusions.

Schlicht teaches for treating bearings with setting heat treatments on steel of the type with minimized inclusions for the purposes of increasing the fatigue life of the bearing. See Schlicht Abstract and col. 2, lines 21-34.

Since Rogov et al. or Blanc and Schlicht are all related to rolling bearings, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the bearing of Rogov et al. or Blanc, based on the teachings of Schlicht, to be treated

Art Unit: 3745

with setting heat treatments on steel of the type with minimized inclusions for the purposes of increasing the fatigue life of the bearing.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Allart et al., as applied to claim 15 above, in view of Rogov et al. or Blanc. Allart et al. discloses all of the claimed subject matter except for the roller supported by a pin with a rolling bearing, arranged with a inner ring coupled with the pin for supporting the roller and the outer ring coinciding with the roller itself.

Rogov et al. or Blanc teach for a hydraulic machine as stated above including the roller supported by a pin with a rolling bearing, arranged with a inner ring coupled with the pin for supporting the roller and the outer ring coinciding with the roller itself for the purposes of facilitating the radial stroke of the piston during operation.

Since Allart et al. and Rogov et al. or Blanc are all hydraulic machines, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the machine of Allart et al., based on the teachings of Rogov et al. or Blanc, to have the roller supported by a pin with a rolling bearing, arranged with a inner ring coupled with the pin for supporting the roller and the outer ring coinciding with the roller itself for the purposes of facilitating the radial stroke of the piston during operation.

Allowable Subject Matter

Claims 9-13 and 19 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Prior Art

Prior art made of record but not relied upon is considered pertinent to Applicant's disclosure and consists of six patents.

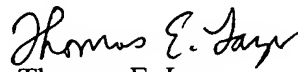
Lemaire et al., Wusthof et al., Samuelsson, Albert, Lenz, and Martin are cited to show the radial piston hydraulic machines.

Contact Information

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Thomas Lazo whose telephone number is (571) 272-4818. The examiner can normally be reached on Monday-Friday from 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Edward Look, can be reached on (571) 272-4820. The fax phone number for this Group is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Thomas E. Lazo
Primary Examiner
Art Unit 3745
September 19, 2006